3 0864 1006 7742 9

PLEASE RETURN

MONTANA

THE BIG SKY COUNTRY AERONAUTICAL CHART

BICENTENNIAL EDITION

1976

MONTANA AERONAUTICS DIVISION
P O BOX 1698
HELENA MONTANA 59601
RETURN POSTAGE GUARANTEED

BULK RATE
U S POSTAGE
PAID
HELENA MONT

Montana is a magnificent flight expanse and we hope this map will aid you in having many safe journeys.

For those new to Montana, we extend our welcome and encourage you to stay awhile to explore our state's amazing array of scenic and recreational areas. We hope those already familiar with the Big Sky Country will continue to help retain its grandeur while enjoying the many attributes that make up Montana.

Modern airports—beautiful scenery—a sportsman's joy both winter and summer, spring and fall, comfortable accommodations, and some of the friendliest people in the west ..... This is Montana.

Good flying!

Thomas L. Judge, Governor

Ronald P. Richards, Director, Department of Community Affairs

Michael D. Ferguson, Administrator, Aeronautics Division

Montana Board Of Aeronautics

Richard O'Brien, Chairman, Conrad
Thomas F. Kiely, Vice Chairman, Butte
Tom Burns, Hobson
William A. Merrick, Bozeman
Leo Collar, Rexford
Bruce Vanica, Billings
A. J. Patenaude, Red Lodge

Radio and Aeronautical Information

FILE A FLIGHT PLAN

FAA requests that you obtain a thorough weather briefing before filing your Flight Plan.

DEPARTMENT OF TRANSPORTATION—FEDERAL AVIATION ADMINISTRATION
FLIGHT PLAN
Form Approved OMB No. 04-R0072

1 TYPE: ☒ VFR ☐ IFR ☐ DVFR
2 AIRCRAFT IDENTIFICATION: N44268
3 AIRCRAFT TYPE/SPECIAL EQUIPMENT: SKYBIRD 100
4 TRUE AIRSPEED: 120 KTS
5 DEPARTURE POINT: HLN
6 DEPARTURE TIME: PROPOSED (Z) 0600 ACTUAL (Z)
7 CRUISING ALTITUDE: 9500
8 ROUTE OF FLIGHT: V2 BZN V2LVM V2 BIL
9 DESTINATION (Name of airport and city): LOGAN FLD BILLINGS
10 EST. TIME ENROUTE: HOURS 1 MINUTES 20
11 REMARKS:
12 FUEL ON BOARD: HOURS 5 MINUTES 0
13 ALTERNATE AIRPORT(S): —
14 PILOT'S NAME, ADDRESS & TELEPHONE NUMBER & AIRCRAFT HOME BASE: M. E. WARD 1211 N 4th AVE HELENA 321-4012
15 NUMBER ABOARD: 4
16 COLOR OF AIRCRAFT: SILVER & BLUE
CLOSE VFR FLIGHT PLAN WITH BIL FSS ON ARRIVAL

FAA Form 7233-1 (5-72)

SPECIAL EQUIPMENT SUFFIX

/T	Transponder, with 64 code capability
/U	Transponder, with 4096 code capability
/D	DME
/B	DME and transponder, with 64 code capability
/A	DME and transponder with 4096 code capability
/F	4096 code transponder and approved area navigation
/S	64 code transponder and approved area navigation
/W	no transponder and approved area navigation

1 Type of Flight Plan
2 Aircraft Identification No.
3 Aircraft Type/Special Equipment
4 True Airspeed
5 Departure Point
6 Departure Time (Proposed and Actual)
7 Cruising Altitude
8 Route of Flight
9 Destination (Name of Airport and City)
10 Estimated Time Enroute
11 Remarks
12 Fuel on Board (Hours and Minutes)
13 Alternate Airport(s)
14 Pilot's Name, Address and Telephone No. and Aircraft Home Base
15 Number Aboard
16 Color of Aircraft

REQUIREMENTS FOR USE OF MONTANA PILOT FLIGHT PLAN

1 All Pilots must be registered and have a Montana registration number.
2 If not able to file by radio, pilots at Non-Flight Service Station points in Montana are authorized to call Flight Service Station Point Collect to file or close Flight Plan.
3 No calls will be accepted from a point served by the Federal Aviation Administration Flight Service Station.
4 No restrictions are placed on either Private or Commercial Flights.
5 Only Montana Flight Service Stations which hold credit cards will accept calls.
6 Federal Aviation Administration Flight Service Station will accept only calls for filing or closing flight plans.
7 Pilot at non-Flight Service Station Airport places Collect phone call to nearest Flight Service Station stating "This is a collect call—Montana Pilot Flight Plan."
8 Please avoid calling during weather broadcast.

FAA FLIGHT SERVICE STATIONS AND U.S. WEATHER BUREAUS

	Weather Phone	FSS Phone
BILLINGS	259-4545	259-4545
BELGRADE (BZN)		388-4242
BUTTE		494-3004
CUT BANK		938-4522
GLASGOW	228-4042	
GREAT FALLS	761-7110	761-7110
HAVRE	265-6424	
HELENA	442-8260	442-9902
KALISPELL	756-4829	
LEWISTOWN		538-3639
LIVINGSTON		222-2411
MILES CITY		232-1503
MISSOULA	542-2230	542-2230

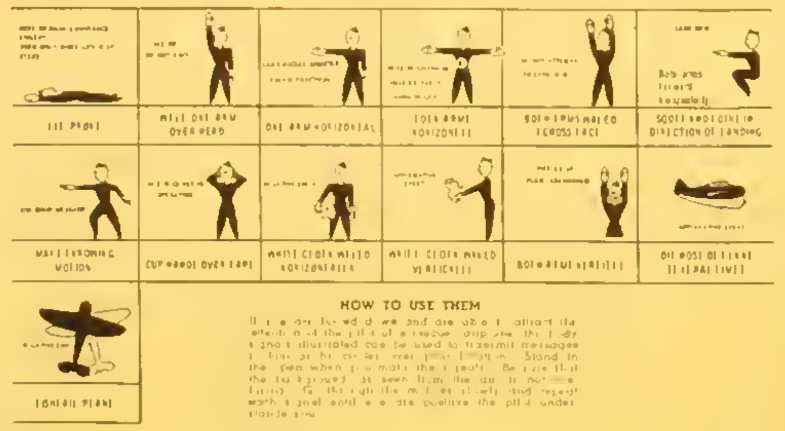
MORSE CODE AND PHONETIC ALPHABET

Alfa .–	Juliett .–––	Sierra ...	2 ..–––
Bravo –...	Kilo –.–	Tango –	3 ...––
Charlie –.–.	Lima .–..	Uniform ..–	4 ....–
Delta –..	Mike ––	Victor ...–	5 .....
Echo .	November –.	Whiskey .––	6 –....
Foxtrot ..–.	Oscar –––	Xray –..–	7 ––...
Golf ––.	Papa .––.	Yankee –.––	8 –––..
Hotel	Quebec ––.–	Zulu ––..	9 ––––.
India ..	Romeo .–.	1 .––––	0 –––––

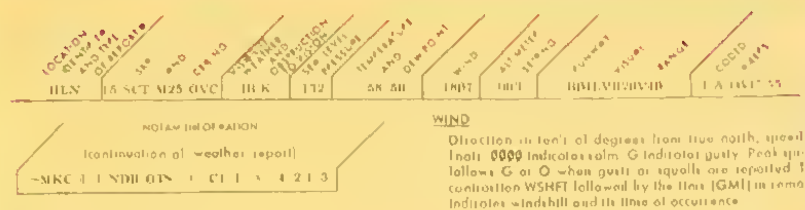
LIGHT GUN SIGNALS

COLOR AND TYPE OF SIGNAL	On the ground	In flight
STEADY GREEN	Clear for take-off	Cleared to land
FLASHING GREEN	Cleared to taxi	Return for landing (to be followed by steady green at proper time).
STEADY RED	Stop.	Give way to other aircraft and continue circling.
FLASHING RED	Taxi clear of landing area (runway) in use.	Airport unsafe—do not land
FLASHING WHITE	Return to starting point on airport	
ALTERNATING RED & GREEN	General Warning Signal—Exercise Extreme Caution.	

EMERGENCY SIGNALS--GROUND TO AIR


LIE PRONE
WAVE ONE ARM OVER HEAD
ONE ARM HORIZONTAL
BOTH ARMS HORIZONTAL
BOTH ARMS WAVED ACROSS FACE
SQUAT POINTING IN DIRECTION OF LANDING
CUP HANDS OVER EARS
WHITE CLOTH WAVED HORIZONTALLY
WHITE CLOTH WAVED VERTICALLY
HOW TO USE THEM

EXPLANATION OF TELETYPEWRITER WEATHER REPORTS



SKY AND CEILING

Sky cover symbols are in ascending order. Figures preceding symbols are heights in hundreds of feet above station.

Sky cover symbols/contractions are:

CLR	Clear: Less than 0.1 sky cover.
SCT	Scattered: 0.1 to 0.5 sky cover.
BKN	Broken: 0.6 to 0.9 sky cover.
OVC	Overcast: More than 0.9 sky cover.
-	Thin (When prefixed to the above symbols.)
-X	Partial obscuration: 0.1 to less than 1.0 sky hidden by precipitation or obstruction to vision (bases at surface).
X	Obscuration: 1.0 sky hidden by precipitation or obstruction to vision (bases at surface).

Letter preceding height of layer identifies ceiling layer and indicates how ceiling height was obtained. Thus:

A	Aircraft
B	Balloon: Pilot, ceiling or radiosonde
E	Estimated
M	Measured
R	Radar
W	Indefinite
V	Immediately following numerical value indicates a varying ceiling

VISIBILITY

Reported in Statute Miles and Fractions. (V=Variable)

WEATHER SYMBOLS

A	Hail	L	Drizzle	SP	Snow Pellets
IC	Ice Crystals	R	Rain	SW	Snow Showers
IP	Ice Pellets	RW	Rain Showers	T	Thunderstorm
IPW	Ice Pellet Showers	S	Snow	ZL	Freezing Drizzle
		SG	Snow Grains	ZR	Freezing Rain

PRECIPITATION INTENSITIES are indicated thus:

Very Light; Light; (no sign) Moderate; + Heavy

OBSTRUCTION TO VISION SYMBOLS

D	Dust	H	Haze	BD	Blowing Dust
F	Fog	IF	Ice Fog	BN	Blowing Sand
GF	Ground Fog	K	Smoke	BS	Blowing Snow

WIND

Direction in tens of degrees from true north, speed in knots. 0000 indicates calm. G indicates gusty. Peak speed follows G or Q when gusts or squalls are reported. The contraction WSHFT followed by the time (GMT) in remarks indicates windshift and its time of occurrence.

Kts × 1.15 = statute mi/hr

EXAMPLES: 3627 — 360 Degrees, 27 Knots
3627G40 — 360 Degrees, 27 Knots, Peak speed in gusts, 40 Knots

ALTIMETER SETTING

The first figure of the actual altimeter setting is always omitted from the report.

RUNWAY VISUAL RANGE (RVR)

RVR is reported from some stations. Extreme values for 10 minutes prior to observation are given in hundreds of feet. Runway identification precedes RVR report.

CODED PIREPS

Pilot reports of clouds not visible from ground are coded with MSL height data preceding and/or following sky cover symbol to indicate cloud bases and/or tops respectively.

NOTAM INFORMATION

- ADP Automatic Data Processing code indicates NOTAM content.
- NTF NOTAM to Follow precedes each subsequent new or cancelled NOTAM.

C Cancelled NOTAM

* CNT Current NOTAM Indicator. The CNT code is followed by the serial number of previously transmitted current NOTAM(s). Consult the NOSUM for current NOTAM data.

4/3 The 4 indicates month of April and the 3 indicates third NOTAM issued in the month of April.

DECODED REPORT

Helena: Record observation, 1500 feet scattered clouds, measured ceiling 2500 feet overcast, visibility 1 mile, light rain, smoke, sea level pressure 1013.2 millibars, temperature 58°F, dewpoint 56°F, wind 180°, 7 knots, altimeter setting 29.93 inches. Runway 04 left, visual range 2000 ft. variable to 4000 feet. Pilot reports top of overcast 5500 feet. Helena NOTAM 4/4: NDB out of service, NOTAM 4/1 cancelled, NOTAM 4/2 and 4/3 current.

TYPE OF REPORT

The omission of type of report data identifies a scheduled record observation for the hour specified in the sequence heading. An out of sequence, special observation is identified by the letters "SP" following station identification and a 24-hour clock-time group, e.g., PIT SP 0715 1M10VC. A special report indicates a significant change in one or more elements.

EXPLANATION OF TELETYPEWRITER WEATHER FORECASTS AND ADVISORIES

TERMINAL FORECASTS contain information for specific airports on expected ceiling, cloud heights, cloud amounts, visibility, weather and obstructions to vision and surface wind. They are issued 3 times/day and are valid for 24 hours. The last six hours of each forecast are covered by a categorical statement indicating whether VFR, MVFR or IFR conditions are expected. Terminal forecasts will be written in the following form:

CEILING: Identified by the letter "C".
CLOUD HEIGHTS: In hundreds of feet above the station (ground).
CLOUD LAYERS: Stated in ascending order of height.
VISIBILITY: In statute miles but omitted if over 6 miles.
WEATHER AND OBSTRUCTION TO VISION: Standard weather and obstruction to vision symbols are used.
SURFACE WIND: In tens of degrees and knots; omitted when less than 10.

Example of TERMINAL FORECAST:

DCA 222323–	DCA Forecast 22nd day of month—valid time 23Z-23Z
10SCT C18BKN5SW 3415G25 OCNL C8X1SW–	Scattered clouds at 1000 feet, ceiling 1800 feet broken, visibility 5 miles, very light snow showers, surface wind 340 degrees 15 knots Gusts to 25 knots. OCNL ceiling 8 hundred feet sky obscured, visibility 1 mile in light snow showers.
12Z C50BKN 3312G22	At 12Z becoming ceiling 5000 feet broken, surface wind 330 degrees 12 knots Gusts to 22.
17Z MVFR BCMG VFR AFT 21Z–	Last 6 hours of FT at 17Z marginal VFR conditions becoming VFR after 21Z.

AREA FORECASTS are 18-hour aviation forecasts plus a 12-hour categorical outlook prepared 2 times/day giving general descriptions of cloud cover, weather and frontal conditions for an area the size of several states. Heights of cloud tops, and icing are referenced ABOVE SEA LEVEL (ASL); ceiling heights, ABOVE GROUND LEVEL (AGL); bases of cloud layers are ASL unless indicated. Each SIGMET or AIRMET affecting an FA area will also serve to amend the Area Forecast.

SIGMET or AIRMET – warns airmen in flight of potentially hazardous weather such as squall lines, thunderstorms, fog, icing, and turbulence. SIGMET concerns severe and extreme conditions of importance to all aircraft. AIRMET concerns less severe conditions which may be hazardous to some aircraft or to relatively inexperienced pilots. Both are broadcast by FAA on NAVAID voice channels.

WINDS AND TEMPERATURES ALOFT (FD) FORECASTS are 12 hour forecasts of wind direction (nearest 10° true N) and speed (knots) for selected flight levels. Temperatures aloft (°C) are included for all but the 3000 foot level.

EXAMPLES OF WINDS AND TEMPERATURES ALOFT (FD) FORECASTS.

```
FD WBC 121745
BASED ON 121200Z DATA
VALID 130000Z FOR USE 1800-0300Z. TEMPS NEG ABV 24000
FT   3000  6000    9000    12000   18000   24000   30000
BOS  3127  3425-07 3420-11 3421-16 3516-27 3512-38 311649
JFK  3026  3327-08 3324-12 3322-16 3120-27 2923-38 281248
```

At 6000 feet ASL over JFK wind from 330° at 27 knots and temperature minus 8°C.

TWEB (CONTINUOUS TRANSCRIBED WEATHER BROADCAST) Individual route forecasts covering a 25 nautical mile zone either side of a course line for the route. By requesting a specific route number, detailed en route weather for an 18-hour period plus a synopsis can be obtained.

PILOTS report in-flight weather to nearest FSS. The latest reports with PIREPS are available by phone of the nearest pilot weather briefing office by calling [illegible]

CRUISING ALTITUDE/FLIGHT LEVEL

BELOW FL 290

180°-359°M	0°-179°M
VFR OR ON TOP EVEN THOUSANDS PLUS 500'	VFR OR ON TOP ODD THOUSANDS PLUS 500'
IFR EVEN THOUSANDS	IFR ODD THOUSANDS

ALTIMETER SETTINGS

BELOW 18,000 FT MSL – use station altimeter setting (QNH)
AT OR ABOVE 18,000 FT MSL – use standard altimeter setting (29.92" HG)

CRUISING ALTITUDES/FLIGHT LEVELS

1 VFR altitudes or flight levels become effective above 3000 ft AGL
2 IFR in controlled airspace: maintain altitudes or flight levels assigned by ATC
3 IFR altitudes or flight levels in uncontrolled airspace are effective from [illegible] upward
4 Continental control area is controlled airspace at and above 14,500 ft excluding:
   a The airspace less than 1,500 ft above the surface of the earth
   b Prohibited and restricted areas other than those listed in Federal Aviation Regulations 71.151
5 Positive control area is controlled airspace from 18,000 ft MSL to and including FL 600. IFR FLIGHT PLAN, TRANSPONDER and 2 WAY RADIO REQUIRED WITHIN THIS AREA

For complete information refer to Federal Aviation Regulations 71.9, 71.15, 91.109 and 91.121

VISUAL FLIGHT RULES-MINIMUMS

91.105 BASIC VFR WEATHER MINIMUMS

(a) Except as provided in 91.107, no person may operate an aircraft under VFR when the flight visibility is less, or at a distance from clouds that is less, than that prescribed for the corresponding altitude in the following table:

Altitude	Flight visibility	Distance from clouds
1,200 feet or less above the surface (regardless of MSL altitude)— Within controlled airspace	3 statute miles	500 feet below, 1,000 feet above, 2,000 feet horizontal
Outside controlled airspace	1 statute mile except as provided in 91.105(b)	Clear of clouds
More than 1,200 feet above the surface but less than 10,000 feet MSL— Within controlled airspace	3 statute miles	500 feet below, 1,000 feet above, 2,000 feet horizontal.
Outside controlled airspace	1 statute mile	500 feet below, 1,000 feet above, 2,000 feet horizontal
More than 1,200 feet above the surface and at or above 10,000 feet MSL	5 statute miles	1,000 feet below, 1,000 feet above, 1 mile horizontal.

(b) When the visibility is less than one mile, a helicopter may be operated outside controlled airspace at 1,200 feet or less above the surface if operated at a speed that allows the pilot adequate opportunity to see any air traffic or other obstruction in time to avoid a collision.
(c) Except as provided in 91.107, no person may operate an aircraft, under VFR, within a control zone beneath the ceiling when the ceiling is less than 1,000 feet.
(d) Except as provided in 91.107, no person may take off or land an aircraft, or enter the traffic pattern of an airport, under VFR, within a control zone—
   (1) Unless ground visibility at that airport is at least 3 statute miles, or
   (2) If ground visibility is not reported at that airport, unless flight visibility during landing or takeoff, or while operating in the traffic pattern, is at least 3 statute miles.
(e) For the purposes of this section, an aircraft operating at the base altitude of a transition area or control area is considered to be within the airspace directly below that area.

91.107 SPECIAL VFR WEATHER MINIMUMS IN A CONTROL ZONE

(a) Except as provided in 93.113, when a person has received an appropriate ATC clearance, the special weather minimums of this section instead of those contained in 91.105 apply to the operation of an aircraft by that person in a control zone under VFR.
(b) No person may operate an aircraft in a control zone under VFR except clear of clouds.
(c) No person may operate an aircraft (other than a helicopter) in a control zone under VFR unless flight visibility is at least one statute mile.
(d) No person may takeoff or land an aircraft (other than a helicopter) at any airport in a control zone under VFR—
   (1) Unless ground visibility at that airport is at least 1 statute mile, or
   (2) If ground visibility is not reported at that airport, unless flight visibility during landing or takeoff is at least 1 statute mile.
(e) No person may operate an aircraft (other than a helicopter) in a control zone under the special weather minimums of this section, between sunset and sunrise (or in Alaska, when the sun is more than six degrees below the horizon) unless—
   (1) That person meets the applicable requirements for instrument flight under Part 61 of this chapter; and
   (2) The aircraft is equipped as required in 91.33(d).

COMMERCIAL BROADCAST STATIONS

Airport location	Radio Call	Hours of Operation	Freq (kHz)	Power (KW)
Anaconda	KANA	Days	580	1.00
Baker	KFLN	Days	960	5.00
Belgrade	KGVW	Days	630	1.00
Billings	KBMY	Continuous	1240	1.00
Billings	KOOK	Continuous	970	5.00
Billings	KOYN	Days	910	1.00
Billings	KURL	Days	730	.50
Billings	KGHL	Continuous	790	5.00
Bozeman	KXXL	Continuous	1450	1.00
Bozeman	KBMN	Days	1230	1.00
Butte	KBOW	Continuous	550	5.00
Butte	KXLF	Days	1370	5.00
Deer Lodge	KDRG	Days	1400	1.00
Dillon	KDBM	Days	1490	1.00
Glasgow	KLTZ	Days	1240	1.00
Glendive	KXGN	Days	1400	1.00
Glendive	KGLE	Days	590	.50
Great Falls	KARR	Continuous	1400	1.00
Great Falls	KEIN	Continuous	1310	5.00
Great Falls	KUDI	Days	1450	1.00
Great Falls	KMON	Continuous	560	5.00
Hamilton	KLYQ	Days	980	1.00
Hardin	KHDN	Days	1230	1.00
Havre	KOJM	Days	610	1.00
Helena	KCAP	Continuous	1340	1.00
Helena	KBLL	Days	1240	1.00
Kalispell	KOFI	Days	1180	10.00
Kalispell	KGEZ	Days	600	1.00
Lewistown	KXLO	Days	1230	1.00
Libby	KLCB	Days	1230	1.00
Livingston	KPRK	Days	1340	1.00
Miles City	KATL	Days	1340	1.00
Missoula	KYLT	Continuous	1340	.25
Missoula	KYSS	Days	930	5.00
Missoula	KGMY	Continuous	1450	1.00
Missoula	KGVO	Days	1290	5.00
Red Lodge	KRBN	Days	1450	1.00
Shelby	KSEN	Days	1150	5.00
Sidney	KGCX	Days	1480	5.00
West Yellowstone	KWYS	Days	920	1.00
Wolf Point	KVCK	Days	1450	1.00

AIRMARKED LOOKOUT TOWERS

Numbered towers on this map are airmarked. Most towers are manned during periods of fire danger only.

NO.	NAME	LAT.	LONG.
23	WEBB MTN	48-49	115-22
29	SWIFT CURRENT	48-48	113-45
32	MT. MARSTON	48-46	114-48
37	CYCLONE	48-44	114-19
38	MT. RODERICK	48-42	115-17
47	BIG CREEK BALDY	48-38	115-35
48	PINKHAM MTN.	48-38	115-07
51	MT. BROWN	48-38	113-50
56	WERNER	48-35	114-36
72	WHITEFISH	48-28	114-20
74	LONEMAN PK.	48-28	113-45
77	JOHNSON PK.	48-27	114-41
96	ASHLEY	48-17	114-12
97	FIREFIGHTER	48-20	113-53
111	RED PLUME	48-09	113-18
128	KAH	47-59	113-39
131	GEM	47-55	115-55
134	MISSION	47-54	113-51
136	SPOTTED BEAR	47-54	113-27
139	RICHARD	47-50	115-01
154	BEAR TOP	47-48	112-52
166	SEX PEAK	47-44	115-10
160	PRISCILLA PEAK	47-42	115-10
162	MUD LAKE	47-38	113-18
163	DRIVEWAY	47-35	115-35
165	BALDY	47-38	114-50
169	CLARK	47-33	115-19
172	COONEY	47-32	113-38
178	PATROL MTN.	47-27	112-54
184	JUMBO	47-23	113-07
191	UP UP MTN	47-20	115-20
199	LITTLE JOE	47-17	115-11
211	FALLS POINT	47-12	112-54
214	THOMPSON PEAK	47-11	114-54
216	DOUBLE ARROW	47-10	113-32
224	STARK MTN.	47-05	114-34
229	LANDOWNER MTN.	47-02	114-56
234	WILLIAMS PEAK	46-58	114-14
236	MINERAL MTN	47-00	113-50
237	MONUMENT	47-00	111-05
239	HUNTER	46-56	113-25
247	GRANITE BUTTE	46-52	112-35
248	PORPHYRY	46-51	110-15
251	UNION	46-48	113-24
252	HOGBACK	46-50	111-43
253	WHITE MTN	46-47	114-39
255	WESTFORK BUTTE	46-44	114-25
265	SLIDEROCK	46-36	113-34
267	ST. MARIES PK	46-31	114-14
272	BLACK PINE	46-26	113-27
274	CABLE MTN	46-13	113-12
291	BENDER	45-47	113-13
292	HIGHLAND	45-46	112-31
293	BARE CONE	45-43	114-26
300	THUNDER MTN	45-31	111-17
301	ODELL	45-34	113-14
307	POKER JIM BUTTE	45-20	106-22
310	HORSE BUTTE	44-44	111-12
312	CINNAMON	45-08	111-14

CROSS WIND COMPONENT CHART

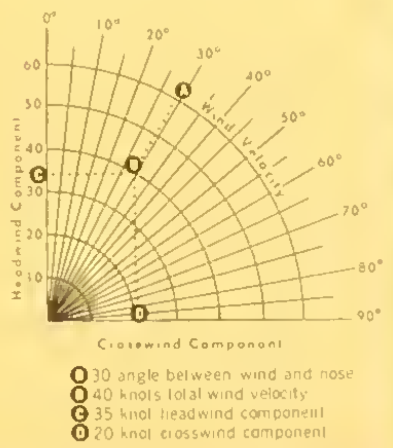
Suggested use of GO/NO/GO wind chart for take off

INSTRUCTIONS

1 Determine maximum 90° cross wind that you can handle, (suggest 20% × stall speed). Place a dot on the 90° line at this value.
2 Determine maximum 45° cross wind that you can handle, (suggest 30% × stall speed). Place a dot on the 45° line at this value.
3 Determine maximum head wind that you can handle, (suggest 60% × stall speed). Place a dot on line at this value.
4 Connect dots with a red line. Values to left of red line are GO wind velocities and directions.

(Not to be used for navigational purposes)

Example on chart below shows effect of 40 Knot wind with 30° angle

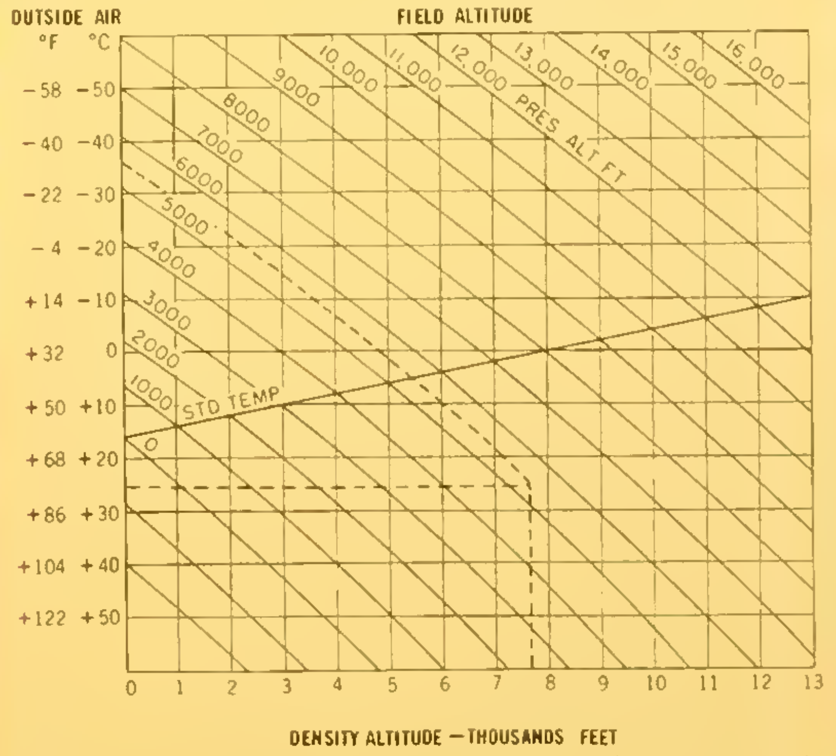


Ⓐ 30 angle between wind and nose
Ⓑ 40 knots total wind velocity
Ⓒ 35 knot headwind component
Ⓓ 20 knot crosswind component

OPERATIONAL ALTITUDE CHART

LEARN TO USE THIS CHART — POST IN PLANE

Operational altitude is the calculated altitude of the air at which the aircraft is flown. Aircraft operation, as a result, may be at an altitude greater or less than the actual altitude above Sea level.



The following example illustrates the simple use of this chart to determine the conditions at the airport you plan to use.
Select the actual altitude of the airport to be used on the diagonal lines marked 'Field Altitude'. Example: 5500 ft. Next select the temperature. Example: 77°F. Follow the temperature line to the right until it crosses the diagonal line 'Field Altitude'. From the point where these two lines cross, follow a line to the bottom of the chart and obtain the operational or density altitude. Example: 7700 ft.

Winter

Pack your parka, toss in your skis and take off for Montana this winter. Beneath your wing-tips you'll find a vast white world of powder snow just waiting to be explored. Best of all, it's still uncrowded and big on western hospitality.

With 27 Rocky Mountain ski areas to choose from you can cruise down the gentler novice or intermediate slopes or "hot dog" it down the heart stoppers. If you're looking for elegant resorts, we've got them — complete with condominiums, heated pools, gourmet restaurants and all the trimmings.

Montana has over 60 paved and serviced airports, 15 of them with full commercial facilities. Most winter resorts furnish transportation from your tie-down right to the lodge.

If cross country skiing or snowshoeing appeal, select one of the back country resorts and break your own trails. Or perhaps you'd prefer just to relax by a big, crackling Montana pine fire.

Snowmobiling is popular, too, and many resorts offer guided winter tours. Yellowstone Park has outstanding opportunities for viewing and photographing wildlife in winter's pristine environment.

Spring

Spring arrives late in the northern Rockies, providing excellent skiing conditions through April, long after more southerly slopes are closed.

Spring is a time of rebirth all across the open range of central and eastern Montana with lush new grass, carpets of wildflowers and fresh stock on the ranches. Dozens of dude and guest ranches offer vacations in true western style nearly any time of the year. They range from small, intimate family operations to deluxe spreads with swimming pools, tennis courts, golf and other amenities. Many working ranches invite guests to join roundups, branding and day-to-day operations.

Spring brings fishing with most Montana trout waters opening by mid-May. Fine mountain streams, lakes and swift rivers supply the most challenging and satisfying angling in the country. By June many of these same streams offer thrilling white water float trips; two—the Missouri and Yellowstone—have organized raft excursions.

Spring is also a good time to sample some of the state's rich historical heritage. From the Custer Battlefield and Lewis and Clark Expedition sites to Montana's 90 ghost towns, the past is just waiting to be rediscovered.

Summer

Spread your wings and fly. The clear, blue sky of Montana beckons.

Glacier National Park, America's most spectacularly beautiful mountain park, offers more than a million acres of unspoiled scenery, 200 sparkling lakes, crystal streams, awesome peaks, alpine meadows, rare wildlife, 900 miles of back country trails and dozens of well-groomed campsites as well as luxury accommodations.

Visit Yellowstone, then fly to western Montana where range upon range of mountains invite you to explore the wilderness on foot or by horseback. Relax in a mountain lodge, strike out on your own or join one of the many licensed outfitters or guides.

Dozens of state parks and recreation areas provide the finest in water sports (including sailing regattas), cave exploring, rock hounding and excellent fishing throughout the summer.

Summer is also rodeo time with plenty of bronc riding, calf roping and bull dogging action all across the state.

Ever been to an Indian reservation? Montana has seven big ones with everything from all Indian rodeos to colorful traditional ceremonials.

Fall

Autumn is the time to really savor Montana. Days are still warm, nights have turned crisp. Mountainsides are splashed with reds and golds, out on the ranges the grass has turned to yellow. The smell of wood smoke lingers in the quiet air, as the lakes grow colder trout are coming to life again. Crowds are gone from the parks and early snows on the peaks have driven wildlife down within easy viewing range.

Whether you hunt with gun or camera, Montana offers one of the nation's greatest reservoirs of wildlife. Bear, elk, deer, antelope, moose, sheep, and goats are here in abundance. Flyways host thousands of geese, ducks and other waterfowl. Grouse and pheasant still roam at will. Lake McDonald, in Glacier National Park, attracts unusual numbers of Bald Eagles from mid October through November.

Rich in mineral resources, the state is increasingly popular for gold panning and rock hounding as well. Mountain streams often yield enough "color" to take home a souvenir; sapphires, garnets, rubies, agates and petrified wood reward rockhounds.

And, when it comes to unusual fall events, where else can you attend a buffalo roundup?

MONTANA AERONAUTICAL CHART

RADIO FACILITIES
FLIGHT SERVICE STATION
VOR FREQUENCY & IDENT
VHF OMNI RANGE (VOR)
TACAN CHANNEL
ENROUTE AIRWAY RADIAL
ALTERNATE AIRWAY RADIAL
AIRWAY BEACON
TRANSITION AREAS
FAN MARKER
COMPULSORY REPORTING POINT
ON REQUEST REPORTING POINT
HELENA
117.7 HLN
TAC 124
BILLINGS
400 BIL
V-85
10000 MSL
264°
V 855
236°
341° 110.3 IGTF
CANTON
NDB FREQUENCY & IDENT
NON DIRECTIONAL BEACON
AIRPORT BEACON
AIRPORT NAME
UNICOM
RUNWAY LENGTH TO NEAREST 100 FEET
RUNWAY OR BOUNDARY LIGHTS
ELEVATION OF AIRPORT
AIRPORT WITH CONTROL TOWER & FREQUENCIES
AIRPORT CONTROL ZONE
ILS FACILITY & OUTER MARKER
MAN MADE OBSTRUCTION
COMMERCIAL BROADCASTING STATION
MAGNETIC VARIATION 1975
CITY
TOWN
VILLAGE
RACE TRACK
MINE OR QUARRY
MOUNTAIN ELEVATION
FOREST LOOKOUT TOWER
HIGHWAY
RAILROAD
MOUNTAIN PASSES
AIRPORTS
PAVED
UNPAVED
PUBLIC USE
WARNING UNCERTAIN OR UNKNOWN
NOT INTENDED FOR PUBLIC ACCESS
MILITARY
HELIPORT (Hospital emergency only)
ABANDONED
RESTRICTED / PRIVATELY OWNED
FAA WEATHER STATIONS
LOCATION
NDB NAME/IDENT/FREQ
BILLINGS
BOZEMAN
GREAT FALLS
MILES CITY
MISSOULA
Vernon L. Moody
January 6, 1976
STATUTE MILES
NAUTICAL MILES
ALBERTA
SASKATCHEWAN
MONTANA
NORTH DAKOTA
SOUTH DAKOTA
WYOMING
IDAHO
Kalispell
Missoula
Great Falls
Havre
Helena
Anaconda
Butte
Bozeman
Billings
Miles City
Glasgow
Lewistown
BIGHORN CANYON NATL. REC. AREA
YELLOWSTONE NATIONAL PARK